

### REMARKS

This Response is filed using the Revised format for Responses.

This Amendment and Response is filed in reply to the Office Action dated December 17, 2002. In this Response, Applicant amends independent claims 1 and 9 to more concisely state the claimed features. Support for the amendments can be found throughout the originally filed disclosure. Cancellations of and/or amendments to the claims are not an acquiescence to any of the rejections. Furthermore, silence with regard to any of the Examiner's rejections is not an acquiescence to such rejections. Specifically, silence with regard to Examiner's rejection of a dependent claim, when such claim depends from an independent claim that Applicant considers allowable for reasons provided herein, is not an acquiescence to such rejection of the dependent claim(s), but rather a recognition by Applicant that such previously lodged rejection is moot based on Applicant's remarks and/or amendments relative to the independent claim (that Applicant considers allowable) from which the dependent claim(s) depends. Furthermore, any cancellations of and amendments to the claims are being made solely to expedite prosecution of the instant application. Applicant reserves the option to further prosecute the same or similar claims in the instant or a subsequent application. Upon entry of the Amendment, claims 1-16 are pending in the present application.

The issues of the December 17, 2002, Office Action are presented below with reference to the Office Action.

With regard to the Office Action, paragraph 1: The Examiner objected to the application disclosure (page 9, lines 2-9). Applicant amends the disclosure to restate the originally filed statement. The amendment to the specification does not present new matter. Applicant thus traverses Examiner's objection.

With regard to the Office Action, paragraphs 2-3: Claims 1-7 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al. (U.S. Patent #6,442,181) in view of Richardson (U.S. Patent #4,803,378).

Applicant's filing date of June 15, 2000 pre-dates the October 6, 2000, filing date of Oliver et al.; however, Oliver is a continuation-in-part of parent application No. 09/370,739, filed

on August 9, 1999, now U.S. Patent #6,151,346. With respect to FIG. 7A of Oliver, used by the Examiner in rejecting independent claims 1 and 9, Applicant notes that the same figure appears in the issued parent application as FIG. 9.

As amended, independent claim 1 now recites, among other things, "a keep-up supply, responsive to the voltage across the capacitor, and to the controller, the keep-up supply for delivering energy to the capacitor *to maintain the voltage at a predetermined driving voltage*". Support for the amendment is located in the specification on page 4 lines 2-9, and on page 11 line 12 - page 12 line 5.

Applicant agrees with the Examiner that Oliver et al. do not teach a keep-up supply for delivering energy to the capacitor to maintain the voltage at a predetermined driving voltage. Applicant also agrees when Examiner states that "Richardson discloses a means ... for sensing a residual *reverse polarity charge* on the capacitor after generation of a pulse and for using the energy stored in it to assist in *recharging* the capacitor for the next pulse" (see Office Action, page 3). Applicant respectfully disagrees, however, with the Examiner's application of Richardson to Applicant's independent claim 1 that includes "a keep-up supply ... for delivering energy to the capacitor *to maintain the voltage at a predetermined driving voltage*". Richardson's "sensing a residual reverse polarity charge" to recharge the capacitor *is not the same* as Applicant's independent claim 1 that includes a keep-up supply to *maintain the voltage* at the driving voltage.

Examiner also states "it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Oliver with the sensing a residual reverse polarity charge on the capacitor as taught or suggested by Richardson."

2 As Examiner knows, a prima facie case of obviousness requires that there be some suggestion or motivation to combine references, that there be a reasonable expectation of success, and that the prior art references teach or suggest all of Applicants' claim limitations. Applying the criteria for obviousness to Examiner's aforementioned statement regarding the combination of Oliver et al. and Richardson, Applicant notes first that Examiner does not provide any motivation or suggestion for combining the Oliver et al. and Richardson references other than to state that it "would have been obvious." As Examiner knows, the motivation and reasonable expectation of success must be provided by the references, and not by the applicant's disclosure. *In re Vaack*, 947 F. 2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Second, even if such

references were combined, as Examiner states, the combined system would include a system that includes "sensing a residual reverse polarity charge on the capacitor as taught or suggested by Richardson," (office action, page 3), which is *not the same* as Applicant's claimed system of amended independent claim 1 that includes "a keep-up supply ... for delivering energy to the capacitor *to maintain the voltage at a predetermined driving voltage*". The aforementioned combination thus fails to teach all features of Applicant's independent claim 1 as originally filed, and as amended.

3 Accordingly, because Examiner fails to satisfy at least two of the three elements for a prima facie case of obviousness, Applicant traverses Examiner's rejection of independent claim 1 based on 35 U.S.C. 103(a), and Applicant considers independent claim 1 to be allowable. Claims 2-8 depend from allowable independent claim 1 and are thus also allowable.

As amended, independent claim 9 now recites, among other things, "replenishing the capacitor voltage using the keep-up supply *in response to the capacitor voltage discharging below the driving voltage*". Support for the amendment is located in the specification on page 4 lines 2-9, and on page 11 line 12 - page 12 line 5.

4 Applicant defers to the discussion of the Oliver et al. and Richardson references with regard to independent claim 1. Further, Applicant reiterates that Richardson also does not teach replenishing the capacitor voltage using the keep-up supply *in response to the capacitor voltage discharging below the driving voltage*. Rather, Richardson teaches closing a switch to recharge a capacitor *when a reverse voltage appears across the capacitor* (Richardson, col. 2 line 36 - col. 3 line 13). Nowhere in Richardson is there any teaching of replenishing the capacitor voltage using the keep-up supply *in response to the capacitor voltage discharging below the driving voltage*, as provided in Applicant's independent claim 9.

Accordingly, Applicant traverses the Examiner's rejection of independent claim 9 under 35 U.S.C. 103(a) and considers independent claim 9 to be allowable. Claims 10-16 depend from allowable independent claim 9 and are thus also allowable.

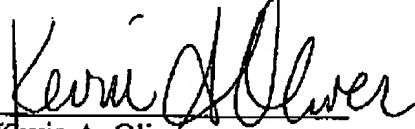
With regard to the Office Action, paragraph 4: Applicant notes with appreciation that claim 8 is allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

### Conclusion

Applicant considers the Response herein to be fully responsive to the referenced Office Action. Based on the above Remarks, it is respectfully submitted that this application is in condition for allowance. Accordingly, allowance is requested. If there are any remaining issues or the Examiner believes that a telephone conversation with Applicant's attorney would be helpful in expediting the prosecution of this application, the Examiner is invited to call the undersigned at 617-832-1241.

Respectfully submitted,

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